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Remarks

In the present response, five claims (1, 9, 14, 17, and 20) are amended; and four claims (3, 6, 15, and 18) are canceled. Claims 1-2, 4-5, 7-14, 16-17, and 19-22 are presented for examination. No new matter is entered.

I. Claim Rejections: 35 USC § 102(b)

Claims 14, 17, and 20 are rejected under 35 USC § 102(b) as being anticipated by Desikan. Applicants respectfully traverse.

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See MPEP § 2131, also, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Since Desikan neither teaches nor suggests each element in claims 14, 17, and 20, these claims are allowable over Desikan.

Claim 14 recites numerous recitations that are not taught or suggested in Desikan. For example, claim 14 recites that the MRAM, cache, and error correction decoding are provided on a same substrate. Desikan never teaches or suggests that error correction encoding is provided on the substrate. Further, Desikan does not teach or suggest that these three separate elements of MRAM, cache, and error correction decoding are provided on a same substrate. Desikan teaches that the MRAM banks "are present in a separate vertical layer above the processor substrate" (emphasis added: see section 3.1).

Claim 17 recites numerous recitations that are not taught or suggested in Desikan. For example, claim 17 recites that MRAM, cache, and the error correction encoding are provided on the substrate. Desikan never teaches or suggests that error correction encoding is provided on the substrate. Further, Desikan does not teach or suggest that these three separate elements of MRAM, cache, and error correction encoding are provided on a same substrate. Desikan teaches that the MRAM banks "are present in a separate vertical layer above the processor substrate" (emphasis added: see section 3.1).

Claim 20 recites numerous recitations that are not taught or suggested in Desikan. For example, claim 20 recites "a" semiconductor memory device comprising an MRAM, ECC circuit, cache, and decoder. Desikan never teaches or suggests a semiconductor memory device having an ECC circuit. Further, Desikan does not teach or suggest a

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semiconductor memory device having four separate elements of MRAM, cache, ECC circuit, and decoder.

For at least these reasons, claims 14, 17, and 20 are allowable over Desikan.

II. Claim Rejections: 35 USC § 103(a)

Claims 1-2, 4-6, 9-13, 16, and 19 are rejected under 35 USC § 103(a) as being unpatentable over Desikan in view of Microsoft Computer Dictionary. Applicant respectfully traverses.

Independent claim 1 recites numerous recitations that are not taught or suggested in Desikan in view of Microsoft Computer Dictionary. By way of example, claim 1 recites that the MRAM, cache, and error detection and correction circuit are all **fabricated on a single** semiconductor substrate. Desikan teaches that the MRAM banks **"are present in a separate vertical layer above** the processor substrate" (emphasis added: see section 3.1). Further, Desikan in view of Microsoft Computer Dictionary does not teach or suggest a semiconductor substrate having the MRAM, cache, and error detection and correction circuit.

Independent claim 9 recites numerous recitations that are not taught or suggested in Desikan in view of Microsoft Computer Dictionary. By way of example, claim 9 recites that the MRAM, cache, and error detection and correction circuit are all provided on a single semiconductor substrate. Desikan teaches that the MRAM banks "are present in a separate vertical layer above the processor substrate" (emphasis added: see section 3.1). Further, Desikan in view of Microsoft Computer Dictionary does not teach or suggest a single semiconductor substrate having the MRAM, cache, and error detection and correction circuit.

For at least these reasons, claims 1-2, 4-6, 9-13, 16, and 19 are allowable over Desikan in view of Microsoft Computer Dictionary.

III. Claim Rejections: 35 USC § 103(a)

Claims 3, 15, and 18 are rejected under 35 USC § 103(a) as being unpatentable over Desikan in view of Microsoft Computer Dictionary and USPN 2004/0181733 (Hilton). Applicant respectfully traverses.

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Hilton is not properly combinable with Desikan. Hilton has a filing date of March 6, 2003 and a publication date of September 16, 2004. The present application, however, has a filing date of February 6, 2004. While Hilton has a filing date before the filing date of the present application, the publication date of Hilton is after the filing date of the present application. As such, Hilton is classified as a 35 U.S.C. §102(e) reference. In other words, the present application and Hilton were, at the time of the invention of the present application, commonly owned by Hewlett-Packard Company. Since Hilton only qualifies as prior art under 35 U.S.C. §102(e), Applicant submits that under the prior art exclusion of 35 U.S.C. §103(c), Hilton does not qualify as a 35 U.S.C. §102(e) reference in an obviousness rejection under 35 U.S.C. §103(a) (*see* MPEP §706.02(l)(3); *see also* MPEP §706.07(a)).

Although claims 3, 15, and 18 are canceled, the independent claims are amended to include subject matter from these claims.

IV. Claim Rejections: 35 USC § 103(a)

Claims 7 and 8 are rejected under 35 USC § 103(a) as being unpatentable over Desikan in view of Microsoft Computer Dictionary and USPN 2004/0225843 (Vaidya). Applicant respectfully traverses.

Claims 7 and 8 depend from claim 1. Vaidya fails to cure the deficiencies of Desikan and Microsoft noted above. Thus, for at least the reasons given above in connection with independent claim 1, dependent claims 7 and 8 are allowable.

V. Claim Rejections: 35 USC § 103(a)

Claims 21 and 22 are rejected under 35 USC § 103(a) as being unpatentable over Desikan in view of Microsoft Computer Dictionary and Butner. Applicant respectfully traverses.

Claims 21 and 22 depend from claim 20. Butner fails to cure the deficiencies of Desikan and Microsoft noted above. Thus, for at least the reasons given above in connection with independent claim 20, dependent claims 21 and 22 are allowable.
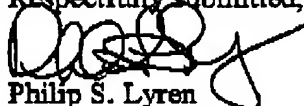
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CONCLUSION

In view of the above, Applicant believes all pending claims are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. (832) 236-5529. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8

The undersigned hereby certifies that this paper or papers, as described herein, is being transmitted to the United States Patent and Trademark Office facsimile number 571-273-8300 on this 26th day of May, 2006.

By Carrie McKerley

Name: Carrie McKerley

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